



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/531,534	03/21/2000	Hemant Madan	017.38083X00	7125
22907	7590	03/31/2006	EXAMINER	
BANNER & WITCOFF 1001 G STREET N W SUITE 1100 WASHINGTON, DC 20001			BLAIR, DOUGLAS B	
			ART UNIT	PAPER NUMBER
			2142	

DATE MAILED: 03/31/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/531,534

Applicant(s)

MADAN ET AL.

Examiner

Douglas B. Blair

Art Unit

2142

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 January 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-35 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-35 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION.

Response to Amendment

1. Claims 1-35 are currently pending in the application.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-2, 12, 20, and 28-29 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent Number 6,209,026 to Ran et al..

4. As to claim 1, Ran teaches a method of managing real-time data for a user terminal, comprising: a content server receiving information from the at least one content provider (col. 5, lines 17-36); sending at least one portion of the information to the user terminal for display on the user terminal (col. 6, lines 26-41); the content server monitoring the information from the at least one content provider to determine if any of the at least one portion of the information has changed, said monitoring including storing the at least one portion in a data store of the content server (col. 12, lines 17-51); updating in the data store the information from the at least one content provider that has changed (col. 12, lines 17-51); and transmitting to the user terminal only the information from the at least one content provider that has changed, the changed information being real-time information (col. 12, lines 17-51).

Art Unit: 2142

5. As to claim 2, Ran teaches the method recited in claim 1, wherein the information comprises a plurality of real-time data values from the content provider (col. 12, lines 17-51).
6. As to claim 12, Ran teaches a computer program executable by computer and embodied on a computer readable medium for receiving a plurality of real-time data values from at least one content provider and transmitting the real-time data values to at least one user terminal, comprising: a user terminal code segment to receive real-time data values (col. 5, lines 17-36); and a real-time data server code segment to receive real-time data values from at least one content provider, to determine if any of the real-time data values have changed from prior real-time data values and transmit the changed real-time data values to at least one user terminal when any of the real-time data values have changed from the prior real time data values (col. 12, lines 17-51).
7. As to claim 20, it features the same limitations as claim 12 and is thus rejected on the same basis as claim 12.
8. As to claims 28-29, they feature similar limitations to claims 1-2 and are rejected for the same reasons as claims 1-2.

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 2142

10. Claims 3-4, 13, 15-17, 21, 23-25, 30 and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Number 6,209,026 to Ran et al. in view of U.S. Patent Number 6,073,075 to Kondou.

11. As to claim 35, Ran teaches a real-time server computer comprising memory storing computer executable code modules that, when executed by the real-time server computer, together provide a real-time data delivery service, each said code comprising computer executable instructions stored in memory, said code modules comprising: a source filter server module that receives data from a real-time content provider and stores the received data in a keyed database (col. 12, lines 17-51); a real-time server module comprising submodules including a client connection submodule that establishes a data server thread connection with a remote mobile terminal (col. 12, lines 17-51); wherein when any data server thread connection receives a key request from a remote mobile terminal, the real-time data server module performs steps including querying a keyed database for corresponding data (col. 12, lines 17-51); and when the queried data differs from data previously sent to the remote mobile terminal, the queried data is sent to the remote mobile terminal, otherwise the queried data is not sent to the remote mobile terminal (col. 12, lines 17-51); and a web engine server module that communicates formatted data to the remote mobile terminal based on the queried data (col. 12, lines 17-51); however Ran does not explicitly teach a hash table.

Kondou teaches a method of accessing a hash table containing a plurality of prior real-time data values using a plurality of keys associated with the plurality of real-time data values (col. 12, lines 21-44).

Art Unit: 2142

It would have been obvious to one of ordinary skill in the Computer Networking art at the time of the invention to combine the teachings of Ran regarding the provision of real-time information from a plurality of content providers with the teachings of Kondou regarding the use of a hash table to store real-time data values because a hash table is an efficient data structure for storing database information.

12. As to claim 3, Ran teaches the method recited in claim 2, wherein the updating of information from the content provider further comprises: accessing a table containing a plurality of prior real-time data values using a plurality of keys associated with the plurality of real-time data values (col. 16, lines 41-59); determining whether the plurality of real-time data values received from content provider has changed from the prior plurality of real-time data values contained in the table (col. 16, lines 41-59); and updating the prior plurality real-time data contained in the hash table with the plurality of real-time values received from the content provider when the plurality of real-time data values received from content provider has changed from the plurality of prior real-time data values contained in the table (col. 16, lines 41-59); however Ran does not explicitly teach a hash table.

Kondou teaches a method of accessing a hash table containing a plurality of prior real-time data values using a plurality of keys associated with the plurality of real-time data values (col. 12, lines 21-44).

It would have been obvious to one of ordinary skill in the Computer Networking art at the time of the invention to combine the teachings of Ran regarding the provision of real-time information from a plurality of content providers with the teachings of Kondou regarding the use

Art Unit: 2142

of a hash table to store real-time data values because a hash table is an efficient data structure for storing database information.

13. As to claim 4, Kondou teaches a method wherein the transmitting of the plurality of real-time data values that have been updated in the hash table to the user terminal further comprises: activating a data thread when a real-time data value of the plurality of prior real-time data values is updated in the hash table (col. 7, lines 2-67 and col. 8, lines 1-3, Information server runs data thread to track the position of the user.); determining the position on a screen in the user terminal corresponding to the real-time data value (col. 5, lines 58-67 and col. 6, lines 1-11); transmitting the real-time data value to the user terminal (col. 15, lines 6-37); and displaying the real-time data value on the screen in the user terminal in the position indicated (col. 15, lines 6-37).

14. As to claim 13, Ran teaches the computer program of claim 12, wherein the real-time data server code segment further comprises: a table for storing the prior real-time data values and being updated when the real-time data values from the content provider have changed from the prior real-time data values (col. 16, lines 41-59); however Ran does not explicitly teach a hash table.

Kondou teaches a method of accessing a hash table containing a plurality of prior real-time data values using a plurality of keys associated with the plurality of real-time data values (col. 12, lines 21-44).

It would have been obvious to one of ordinary skill in the Computer Networking art at the time of the invention to combine the teachings of Ran regarding the provision of real-time information from a plurality of content providers with the teachings of Kondou regarding the use

Art Unit: 2142

of a hash table to store real-time data values because a hash table is an efficient data structure for storing database information.

15. As to claim 15, Ran teaches a real-time data server comprising a source filter server module code segment to receive real-time data values from a content provider (col. 12, lines 17-51) and determine if the real-time data values have changed from prior real-time data values stored, and activate a data thread code segment when the real-time data values have changed from prior real-time data values (col. 12, lines 17-51).

16. As to claim 16, Ran teaches a real time data server module code segment to communicate between the user terminal code segment and the source filter server module code segment through the data server thread code segment (col. 12, lines 17-51).

17. As to claim 17, Ran teaches a source filter module comprising a code segment to receive the real-time data values from the content providers and update a table (col. 12, lines 17-51).

18. As to claims 21 and 23-25, these claims feature the same limitations as claims 13 and 15-17, respectively, and are thus rejected on the same basis as claims 13 and 15-17.

19. As to claim 30, it is rejected for the same reasons as claim 3.

20. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Number 6,209,026 to Ran et al. in view of U.S. Patent Number 6,073,075 to Kondou et al. as applied to claim 4, in further view of U.S. Patent Number 6,442,565 to Tyra et al..

21. As to claim 5, the Ran-Kondou combination teaches the method recited in claim 4; however the Ran-Kondou combination does not explicitly teach the use of remote method invocation.

Tyra teaches a method for updating data using a data thread that is activated by using remote method invocation (col. 3, lines 50-67 and col. 4, lines 1-8).

It would have been obvious to one of ordinary skill in the Computer Networking art at the time of the invention to combine the teachings of Ran-Kondou regarding updating real-time data on a terminal with the teachings of Tyra regarding the use of remote method invocation because remote method invocation reduces the amount of data transmitted across the network (Tyra, col. 3, lines 30-41).

22. Claims 6-11, 14, 18-19, 22, 26-27, and 31-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Number 6,209,026 to Ran et al. in view of U.S. Patent Number 6,073,075 to Kondou et al., in further view of U.S. Patent Number 6,173,316 to De Boor et al..

23. As to claim 6, Kondou teaches requesting a connection by the user terminal (col. 10, lines 41-48); spawning a data server thread (col. 7, lines 2-67 and col. 8, lines 1-3, Information server runs data thread to track the position of the user.); retrieving a user defined portfolio by the data thread containing a plurality of keys (col. 10, lines 41-48); and monitoring the plurality of keys contained in the user defined portfolio and identifying currently active keys of said of the plurality of keys (col. 5, lines 36-57); however Kondou does not teach the generation of HTML containing embedded applets.

Ran teaches the use of HTML for downloading information to a user terminal (col. 16, lines 41-59); however Ran does not teach the use of applets.

De Boor teaches generating activated HTML page containing an embedded applet and downloading to a user terminal (col. 4, lines 45-60).

It would have been obvious to one of ordinary skill in the Computer Networking art at the time of the invention to combine the teachings of the Ran-Kondou combination regarding updating real-time data on a terminal with the teachings of De Boor regarding the use of HTML and applets because the use of markup languages in wireless devices allows seamless integration to the Internet (De Boor, col. 4, lines 61-67 and col. 5, lines 1-15).

24. As to claim 7, Kondou teaches a method comprising reading the currently active keys (col. 5, lines 36-57); determining if the currently active keys have changed (col. 7, lines 2-67 and col. 8, lines 1-3); updating the hash table with the real-time data values for currently active keys (col. 7, lines 2-67 and col. 8, lines 1-3); and downloading real-time values for the currently active keys that have changed from the hash table to the user terminal (col. 7, lines 2-67 and col. 8, lines 1-3).

25. As to claim 8, De Boor teaches disconnecting all connections to the user terminal when the shutdown request was made (col. 59, lines 23-34); however De Boor does not explicitly teach a method of determining whether a shutdown request was made.

Official notice is taken that the idea determining whether a shutdown request was made was well known in the Computer Networking art at the time of the invention.

It would have been obvious to one of ordinary skill in the Computer Networking art at the time of the invention to combine the teachings of De Boor regarding disconnecting connections with the determining whether a shutdown request was made because allowing a user to shutdown a device saves energy.

26. As to claim 9, Kondou teaches a method of retrieving the plurality of real-time data values on a periodic basis (col. 7, lines 18-21).

Art Unit: 2142

27. As to claim 10, Kondou teaches a method for notifying a data server thread when a real-time data value of the plurality of data has changed (col. 7, lines 2-67 and col. 8, lines 1-3).

28. As to claim 11, Kondou teaches a method informing the data server thread of a plurality of new active keys (col. 7, lines 2-67 and col. 8, lines 1-3); receiving the plurality of real-time data values from the data server thread (col. 7, lines 2-67 and col. 8, lines 1-3); and updating the screen on the user terminal associated with each time data value of the plurality of real-time data values (col. 15, lines 6-37).

De Boor teaches a method of activating an embedded applet received from a data server thread in the user terminal and determining whether a page change is required (col. 59, lines 23-34).

29. As to claim 14, Ran teaches a web engine server module code segment to access a database having a portfolio generated by a user and generate an HTML page, wherein upon receipt of a connection request from the user terminal the web engine server module code segment downloads the HTML page to the user terminal code segment (col. 16, lines 41-59); however Ran does not teach the use of an applet with HTML.

De Boor teaches downloading an applet to use with HTML on a wireless terminal (col. 4, lines 45-60).

It would have been obvious to one of ordinary skill in the Computer Networking art at the time of the invention to combine the teachings of the Ran-Kondou combination regarding updating real-time data on a terminal with the teachings of De Boor regarding the use of HTML and applets because the use of markup languages with applets in wireless devices allows seamless integration to the Internet (De Boor, col. 4, lines 61-67 and col. 5, lines 1-15).

Art Unit: 2142

30. As to claim 18, Ran teaches a terminal comprising a HTML page to display the user terminal code segment to update the user terminal code segment when the time data values are received from a server (col. 16, lines 41-59); however Ran does not teach the use of an applet or JavaScript with HTML.

De Boor teaches downloading an applet to use with HTML on a wireless terminal (col. 4, lines 45-60).; however; De Boor does not explicitly teach the use of JavaScript.

Official notice is taken that it was well known in the Computer Networking art to combine JavaScript code with HTML at the time of the invention.

It would have been obvious to one of ordinary skill in the Computer Networking art at the time of the invention to combine the teachings of the Ran-Kondou combination regarding updating real-time data on a terminal with the teachings of De Boor regarding the use of HTML and applets because the use of markup languages with applets in wireless devices allows seamless integration to the Internet (De Boor, col. 4, lines 61-67 and col. 5, lines 1-15).

31. As to claim 19, Ran teaches a web engine server module comprising: a web server module code segment to communicate to the user terminal code segment and retrieve a portfolio specified by the user terminal code segment from a database (col. 16, lines 41-59); and a pagination engine module code segment, in communication with the web server module code segment, to create the HTML page segment based on the portfolio selected and the size of the screen on a user terminal (col. 16, lines 41-59); however Ran does not teach the use of an applet with HTML.

De Boor teaches downloading an applet to use with HTML on a wireless terminal (col. 4, lines 45-60).

Art Unit: 2142

It would have been obvious to one of ordinary skill in the Computer Networking art at the time of the invention to combine the teachings of the Ran-Kondou combination regarding updating real-time data on a terminal with the teachings of De Boor regarding the use of HTML and applets because the use of markup languages with applets in wireless devices allows seamless integration to the Internet (De Boor, col. 4, lines 61-67 and col. 5, lines 1-15).

32. As to claim 22 and 26-27, they feature the same limitations to claims 14 and 18-19, respectively, and are thus rejected on the same basis as claims 14 and 18-19.

33. As to claims 31-34, they are rejected for reasons pointed out above.

Response to Arguments

34. Applicant's arguments filed 1/26/2006 have been fully considered but they are not persuasive. The applicant argues that Ran does not mention that only changed information is sent to the user terminal with regard to claim 1, Ran does not teach or suggest determining whether the plurality of real-time data values has changed, but instead merely "processes the requested real-time traveler information" with regard to claim 3, and finally that Kondou does not teach or suggest determining the position on a screen in the user terminal corresponding to the real-time data.

35. With respect to the argument for claim 1, the warnings sent out regarding the real time traveler information constitute changed data, because you would not be sending a warning about something that has not changed. These warnings are not disclosed as being sent including old data that has not changed, thus only the changed data is sent. Therefore the warning reads on the

Art Unit: 2142

applicant's claims as the independent claims are completely silent about any type of data format for the changed information sent to the terminal.

36. With respect to the argument for claim 3, for reasons discussed with respect to the arguments for claim 1, the warnings are sent based on determinations that the real-time data has changed.

37. With respect to the argument for claim 4, the claim language is broad enough to read on any display system. All displays make some positional determination on where information is placed on a screen as displays do not just randomly place data. Formatting is inherent to any display.

38. As pointed out above, the current claims can be interpreted broadly. Should the applicant choose to narrow the claims to more specifically point out the applicant's invention the Examiner would like to direct the applicant to U.S. Patent Number 6,536,041 to Knudson et al..

Specifically, the applicant should strongly consider Figures 3, 6, and 7 and the corresponding descriptions provided in the disclosure of Knudson.

Conclusion

39. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period

Art Unit: 2142

will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.


40. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Douglas B. Blair whose telephone number is 571-272-3893. The examiner can normally be reached on 8:30am-5pm Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Caldwell can be reached on 571-272-3868. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Douglas Blair

DBB



SUNJOB JAROENCHONWANIT
SUPERVISORY PATENT EXAMINER